PRANAM

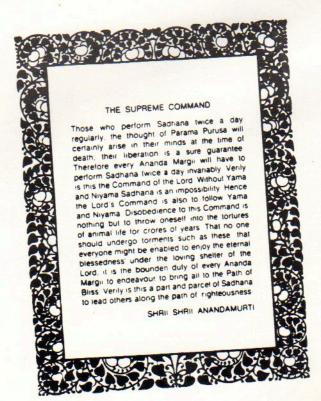
ANANDA MARGA SUVA SECTORIAL NEWSLETTER



JUNE - JULY 1983



Ananda Vanii	3
. Mr Till W	
The Eagle has landed at Mt Tully Feedback on Hobart highschool	5
Feedback on Hobart highschool Narada Muni and the kitten	6
Baba's Birthday at Atuanui Excerpts from Neo-Humanism	10
He is always with you	12
Prabhat Samgiita	24
Panchatattva: An advance hypothesis Notices Addresses	25
Addresses	



BABA'S BIRTHDAY VANII 1983

'Human society is one and indivisable. Keeping this supreme truth ever fixed in one's vision, one will have to think of promoting human welfare, love for humanity, human solidarity and universal fraternity, and move accordingly. Not for a single moment one should forget it nor even ignore it.

Due to paucity of intellect or mutual conflicts in the past, a vast number of creatures have become totally extinct today from the surface of the earth. Let the human beings not meet the same dreadful consequence."

— Shrii Shrii Anandamurti Ananda Purnima, 1983

The Eagle has landed at Mt. Tully

The Eagle has landed at Mt. Tully.

The Lightforce is out and space probes and communications satellites are exploring the galaxy.

But there's no panic. No need to call in the R. A. A. F. It's the Stanthorpe district's newest school, a school with a difference.

It's called the Mt. Tully Community School, a school which its supporters hope will be heard of a lot more in years to come.

The school is being run by the Ananda Marga movement on the Ananda Palli community farm at Severnlea. It opened earlier this year and is still very much in its infancy, with all the necessary approvals still in the pipeline.

The Stanthorpe Shire Council has given interim approval for the establishment of the school, pending improvements including upgrading of the road, provision of a parking area and a 1000 square metre recreational area amongst them.

The Ananda Pallicommunity has been working with the Council to get the school operational for before it can receive Commonwealth Schools Commission funding, it must meet all the

necessary Council

At the same time the community has been in constant contact with she State Education Department to ensure that all is in order with its curriculum and other aspects governed at that level.

Finance

In the meantime the community is financially supporting the school and its 21 students, and the Head Teacher, Greg Firmstone, is working voluntarily. The annual school fees are \$300, much lower than the average private school.

The Mt. Tully School is a fascinating concept in education. While it is run by the Ananda Marga basically but not exclusively for the children of its community, (a number of children travel from Stanthorpe each day), its objectives are to provide the children with a sound education and at the same time build their character, according to Mr. Firmstone.

Where it is different is in Mr. Firmstone's teaching methods.

A qualified high

school teacher and former Christian Brothers College student, Mr. Firmstone, 33, has developed an innovative approach to teaching which is producing impressive results.

Parents

The school is divided into two classes, the under sevens and the 7 to 12 year group. Parents are rostered on for at least one half day a week to help in the school parental involvement as an integral part of its operation.

The curriculum is built around fantasy. Mr. Firmstone maintains that drama is a critical part of the philosophy of education.

of the year - that's the timit of their fantasy. Here the entire educational curriculum is built around a play," he said.

Enter The Eagle, or specifically the older group's classroom. The group calls itself Lightforce, and they in turn are the central characters in the play. The Cosmic Magician' which has been developing since the beginning of the school year and will be presented for the people of Stanthorpe later this year.

The play has been written by Mr. Firmstone while songs and music in the play have been written by the teacher and students working together. It is a totally original production.

To that point it may not sound much like conventional education, but in fact the play becomes the entree to reading, writing and arithmetic.

Progress

The walls of the class room have a galactical

theme, but on it also are found charts which monitor the progress of each student.

There are charts for reading, spelling and maths. For each 100 per cent correct spelling exercise the students gets a space probe - for two space probes a communications satellite (to the uninformed adult these could be identified as coloured pins).

The same process takes place with reading and maths and the ultimate objective is to have enough space probes and communications satellites for each student to create their own galaxy.

And it appears to work. For instance, each student at the beginning of the year were set six books to read. Some already only half way through the year have completed the six books, and more have been set.

The school has a comprehensive library including books from most religious denominations.

Mr. Firmstone says discipline is a key element at the school. "When we started we had 17 kids and we all sat down and talked about school rules. I asked them to make their own rules, and they came up with 19 of the 20 1 had in mind," he said.

"They came up with things like 'No hitting' and we put that into words, but the point was it was their own rules."

Yoga

Yoga plays an important part at the school.
"If one of the kids is getting a bit slack I tell them to go to the 'brig', where they meditate for however long they feel it is necessary before they rejoin the group. It's the opposite to the stand-in-the-corner

punishment syndrome", Mr. Firmstone says.

At the start of the school year Mr. Firmstone gave each student a book which he prepared individually called 'My Higher Self Awareness Book'. It is divided into five parts - Heart/Soul/Body/Mind/Secret Points.

Under each heading are a series of questions to be answered each day by a tick or cross, such as Have I been kind? Was I happy? Was I honest with myself? Did I brush my teeth? Was I a greedy guts?

Each week the teacher has a confidential meeting with each student at which time they can discuss any problems they have.

Mr. Firmstone says he would not have been able to have introduced the methods he is now using in a conventional school system. But by the same token he is quick to point out that he meets regularly with all other district headmasters to discuss mutual problems and educational developments.

He believes it is essential that the school should be part of the wider community and that the students should not see themselves as being outside the community. That is one of the reasons for the proposal to perform the play in Stanthorpe.

A former Secretary of the Alternative Schools Association - there are now about 20 member schools, most in New South Wales and Victoria - he is quick to criticise what he terms 'weirdo religious groups who put chain wire fences around themselves'.

Allegations

Both Mr. Firmstone and Mr. Richard Pfeiffer, who with his wife Gaotami first set up the Ananda Palli community at Severnlea eight years ago, are acutely conscious of the allegations that the Ananda Marga in Australia is a political guerilla group.

They say the three Ananda Marga members convicted after the Hilton Hotel bombing were framed. Locals still remember the helicopters and shadowy security figures who kept the Ananda Palli community under constant surveillance after the bombing.

When the school was first mooted, Mr. Firmstone and Mr. Pfeiffer went to great pains to ensure that the movement of children from the Severnlea State School did not upset staffing arrangements at the school, which a number of the children had previously attended.

They believe the school is now well accepted by local residents, and hope that as the students can become more involved in sport, eisteddfods and other activities, it will make its own niche

in the community.

The school has the capacity to take 38 students and Mr. Firmstone is expecting an increase in numbers next year. The interim Council approval will allow for up to 80 students on the present

High School

Ultimately, the Ananda Palli community's goal is to have a high school as well on their 100-acre property.

But why not use the existing school system? Mr. Firmstone pointed to a poem titled, 'I am a child of the Universe' in the student's 'Higher Awaréness Book' which he said best explained the Ananda philosophy:

"The Universe is my native land.

I will not give my heart to any country, group or

which tries to put chains on my heart, soul, mina or body.

These chains try to keep me separate from my spiritual brothers and sisters

Who are all living forms. They are my brothers and sisters because God is the Father and Mother to us all.

I will give my heart to God.

I will break these chains with love."

(from a cover story in the local paper; "The Border Post")

POSITIVE FEEDBACK

News about the Hobart school.

I have recently been contacting the parents of the children who attended the Ananda Marga secondary school in Hobart.

I wanted them to know about the film "With Prejudice" which would be showing here soon — I felt that everything which affected Ananda Marga affected them and their children and that they should be made aware of anything positive which would reverse the bad impression left by all the bad publicity at the time of the Yagoona incident.

As I spoke to some of the parents I was made aware of the impact which the school made on the lives of their children. Some of the parents are indeed full of praise and gratefulness for the tremendous change and improvement in their children and for the way this has led them to a successful career. One of the parents volunteered a donation for C.A.A.D.A. as a gesture of thanks and said that, in her mind, there was never any doubt about the innocence of the three young accused. (Her son is now training to become an air traffic controller and doing extremely well).

In the light of the years of struggle to keep the A.M. school going and the feeling of disappointment and apparent failure which we experienced when the school had to close finally, it is evident that Baba is now showing us that a lot of good work was achieved in that time and that the results were indeed in His bands.

Baba Nam Kevalam Sundarii.

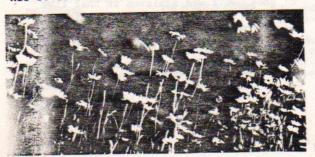
NARADA MUNI & the kitten

One day I came across a dead kitten. By what I saw it seemed like the kitten had just been born and I was wondering if it was some kind of miscarriage or if in fact, some sadistic prisoner or prison officer had killed it. It was a painful sight and I instinctly looked around for its mother. I then saw her and I think she was crying. Certainly when I moved towards her she began to cry seeing me. I can still see the psychic'hands' that seemed to have been held out to me as I moved to her and she to me. As I was mentally calling to her to come to me, she ran full of distress and despair I picked her up and as I began to stroke her , she purred and cried at the same time. I could feel so strongly the support and comfort she was wanting and feeling. It was really moving and I felt my whole being melting with sympathy and empathy.

For sometime I continued to caress and stroke her until I felt I better go for my noon sadhana. Such a look of pain and despair was in her eyes as I put her down to leave. Consequently my sadhana was not all that pleasant and to this day it reinforced in meBaba's Neo-humanistic words about the feelings of animals and plants as well as our own.

Recently I was told of an incident where during a big bush fire, firefighters came across a mound of koalas. They were all huddled together so that only those on the outside got burnt (to death) while those inside were sheltered from the deadly flames. When the firefighters arrived apparently the koalas still alive went running over to them crying and clinging onto the firefighters' legs(!).

We just cannot ignore the feeling or obligation to our animal and plant friends. Abuse to any of them is tantamount to abusing Baba and his loved ones.

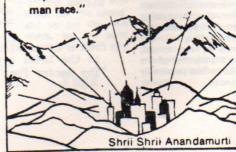


The next day I saw the mother cat and she seemed back to her normal self. Of course only Baba knows what inner trauma and scars were left from her kittens death. But her 'recovery' did serve to remind me that no matter how terrible or cruel life may seem, it overcomes in time and moves on. We can't become callous in our philosophical or rational approach to life, but equally we cannot let our emotions overwhelm us into a state of despair and hopelessness. Rather let our inner tender feelings inspire our rationality to alleviate lifes sufferings and injustices. Through Neo-humanism this balance between the heart and intellect can achieve the desired result needed for universal happiness and progress.

> Narada Muni. (16/5/83)

"Just as the advent of the crimson dawn is inevitable at the end of the cimmerian darkness of the interlunar night, exactly in the same way I know that a gloriously brilliant chapter will also come after the endless reproach and humiliation of the neglected humanity of today. Those who love humanity, those who desire the welfare of all living beings, should be vigorously active from this very moment, after shaking off all lethargy and sloth, so that the most auspicious hour arrives at the earliest.

...This endeavor, the well-being of the human race, concerns every-one—it is yours, mine, and ours. We may afford to ignore our rights, but we must not forget our responsibilities. Forgetting our responsibilities implies the humiliation of the human race."



The Trouble With Idealists

"...as long as a magnificent, healthy and universalistic society is not well established, humanity's entire culture and civilisation, its sacrifice, service and spiritual endeavour will not be of any worth whatsoever."

(Ananda Vanii, Jan 1973)

The uniqueness of Ananda Marga ideology is its proposition that spiritual effort is valueless if not effectively combined with social transformation. Not only must the fruits of spiritual endeavour be channelled into selfless service; there must also be real and lasting results.

It follows that every margii must be vitally concerned about the real impact of AM ideology on society. By 'real' I mean practical, widespread and substantial.

However, in applying our ideology, a number of problems arise. These are similar to those experienced by all idealists and, if not overcome, can turn a precious and valuable treasure into a narrow and sectarian dogma. If we fail to see the dangers we will lose the capacity to materialise neo-humanism - to influence social trends by an infusion of creative expansive consciousness and its rational concomitants.

The main dangers are: disparallelism with the real world; rigidity of ideas; lack of cooperative spirit; and a misplaced faith in words. These are not really separate but they can be discussed one by one, for clarity.

Disparallelism is the inability to join ideals with practical reality. Social idealists are often rightly criticised for their obsession with ideas to the exclusion of practical, revolutionary activity and structural social change. But the value of ideology is not in some closeted victory of ideas. "One must remember, theories are not the deliverers of living beings. The deliverer is that high... (and) vigorous competence which brings about the fusion of the hard reality of existence with the ultimate point of the visionary world." (The Human Society Partl)

There is no sense in trying to prove or pronounce the superiority of certain ideas and there is no sense in imagining any miracle is being worked other than that of our own collective effort of heart, mind and body. Our

idealism, our strategy as spiritual revolutionaries, must take practical form within current events and social movements.

Rigidity in idealism effectively prevents the spread of one's ideals. People with such an outlook generally consider themselves as 'purists' and do not believe they have to adapt to the world; rather, they expect the reverse. They are concerned with 'quality not quantity' of support for their own cause, and so write the prescription for their own social irrelevance. Such people miss the dynamic principle of ideology and start to generate dogma.

Cooperative spirit can be lost in idealism when those tending towards dogma (as mentioned above) seek to impose their concepts and structures on others with whom they live and work. They lack flexibility and the sincerity of their 'cooperation' is in question; others see their principle of social equality as deficient. In the spirit of service we must, instead, think what we have to offer society, rather than the reverse. We cannot create separately from the real needs and demands of people in society, or expect all to come to us. A genuine cooperative spirit acknowledges the value of others' contributions and seeks to work such contributions together into a living force.

"The essence of cooperation borne of moving together aims at widening or expanding the mental being of a person by striking down one's barriers of meanness again and again. And hence I reiterate that society is like... a batch of pilgrims gathering a strange power of mind in travelling together and, with its help, solving all the problems of their individual and social lives."

(Supreme Expression 2, 114)

Finally, idealists can place too much importance on words and simple intentions, particularly in politics, so that there will be a gloss over the reality. They can fool themselves and/or others. If words, or intentions, are considered all important, people are easily diverted from a practical and revolutionary task. Actions hold more meaning than words and good intentions must be assessed in light of their practical effects.

The dangers of idealism thus bear some examination by us all, as margiis trying to implement a practical and revolutionary idealism. We need to recognise and avoid all those tendencies towards: narrowness, dogma, inflexibility, impracticality, meanness and naivety.

These are not simply the defects of someone else's ideology but obstacles we face in implementing our own. To give full expression to our personal spiritual endeavour, by helping create a "magnificent, healthy and universalistic human society", we have to fight through and overcome all obstacles.

Govinda April 83.



New Zealand News

BABA's Birthday at Atuanui

Everyone started arriving at Atuanui, N.Z.'s first Master Unit, at about noon, and spent some time settling in and having lunch. We then proceeded to dig a hole for the tree-planting ceremony. Then we had to take the plant, a small but soon to be quite large bamboo, across a rickety bridge over the creek. This took the attention of about 6 Margiis as the bamboo and root system weighed around 700 pounds. We finally got it across and into the giant hole and performed the ceremony while everyone filled in the dirt and gave the giant plant a good waterng. It was a nice start to the weekend.

Next came an Akhanda Kiirtan held in a converted shed (soon to be Gopal & Madhuriis house), it was a little cool but a good incentive to keep moving. Following this came the reading of the Vanii, a nice talk by Dada Nityapremananda and lots of somgs. We all ended up invading Gopal & Madhurii's living room for dinner, as it had a lovely fire going. The rest of the evening consisted of songs, stories and lots of dicussion.

The morning began with a collective DC and then breakfast. The wedding of Chris and Astrid was held inthe grove where the bamboo was planted. The rain stayed away long enough for the wedding to proceed

a very nice event with about 50 people present. After distributing sweets amid many photos being taken, everyone went over to the DC hall where a large feast had been prepared. It was then decided that a guided tour of the property would be nice so about 20 odd people set off in 2 different directions. The property is bordered on one sideby a very large nature bush reserve with waterfalls and beautiful rock pools.

It was an inspiring time although we were only there for about 30 hours, and hopefully in the future these events will become even more inspiring as the Master unit develops amidst the natural beauty that surrounds it.

Excerpts from Neo-Humanism

To build a healthy human race we should have given them proper guidance in philosophy in science, in all branches of human knowledge

To buid a healthy human race we should have given them proper guidance in philosophy, in science, in all branches of human knowledge - which we did not do. We have utilised science more for destructive purposes than for benevolent aims; we have distorted the thought processes of human beings; we have deliberately misguided the people instead of leading them along the proper path. We have taught people to think about which bomb can annihilate many millions of people at a time- but we never propagated a philosophy to teach them to think how millions of people could be benefitted by psycho-spiritual practices. Thus human beings of today are following a defective path, and there is a desperate need for a change in direction. The only remedy is Neo-Humanism.

There are three stages on this path of Neo-Humanism. The first one is spiritual cult (practice) . What is spiritual cult? It is physico-psycho-spiritual. This physicopsycho-spiritual process will show you how to remove the defects of the psychic world and also the external world, and enable you tomove towards the spiritual world without any delay. This movement towards the spiritual goal will also help you to establish yourself in the psychic and physical worlds, so you will be able to render greater service to the people. This is what I call "spiritual cult Progress in this spiritual cult starts with the elevation of protoplasmic cells, and finally ends in the attainment of the Supreme Goal. This physico-pyschospiritual cult will help the physical world and the psyches of the psychic world directly and indirectly, and also the spiritual , directly. But this is not enough; our journey does not end here.

The second stage is spiritual essence. This stage is related mainly to the pyschic and spiritual strata. If you consider the entire human race, you will see that humanity has a collective mind (not the Cosmic Mind). Now, changes will have to be effected in the mental flow of this Collective Mind: you will have to create a new wave of thought in it. Because of the manner of human thinking thus far, the pace of human progress has been painfully slow. If it is given a new direction, the speed of progress will be greatly accelerated.

Thus we find that the second stage of spiritual essence will take place in the psychic and spiritual realms; it will occur in the collective psychic mind, in the collective ectoplasm of the entire humanity. Then the global thought processes of humanity will take an entirely new turn, and that will also strenghten humanitys collective spirit. Humanity as a whole will become converted into a powerful and spiritual force, and in that stage no pseudo-humanistic=strategy will work. All other weapons will become completely powerless before this mightiest spiritual weapon(Brahma'stra).

And when this surging Neo-Humanism overflows in all directons, making all things sweet and blissful, unifying individual life with collective life, and transforming this earth into a blissful heaven - that very state of Supreme Fulfillment is the state of spirituality as a mission. That is the highest state of attainment in human life, the source of all inspiration. (the above paragraph is from pp.13-14)

But there is still something more beyond this, which I have described as "spirituality as a mission". So, first there is "spirituality as a mission". So first there is "spirituality as a cult", secondly "spirituality in essence" and thirdly "spirituality as a mission".

All the existential phenomena are emanating from the Existential Nucleus. The existential nucleus of a single individual is directly linked to the controlling point of the Cosmic Nucleus, of the cosmological order. But this path is not psycho-spiritual; according to Neo-Humanism, the final and Supreme Goal is to coincide one's individual existential nucleus with the Cosmic Existential Nucleus. As a result, the individual's entire existence becomes one with the Controlling Nucleus of the cosmological order, and that will be the highest expresion of Neo-Humanism. That Neo-Humanistic status will save not only the human world but the plant and animal worlds also. In that supreme Neo-Humanistic status, the universal humanity will attain the consumation of its existence. Then nothing will be impossible for human beings; they will be able to do anything and everything.

Today's humanity is in despair; people think too much about their imperfections. They think, "Can I do it?" But in that supreme, Neo-Humanistic status, they will say, "Yes, I am a Neo-Humanistic



In the temple of silence
I sit
Breathlessly awaiting
the sound of Thy footsteps
Echoing upon the alter





being and I am destined to do great workfor that I have come on this earth. So there is no scope for doubt whether I can do it or not."

Long ago I went to Purulia. I was carrying heavy baggages with me. I asked a village man, "Can you carry this baggage?" He replied, "Why not, certainly I can !" I appreciated his answer very much, and i am sure that one day this Neo-Humanism will inspire the world population to say, "Why not, certainly we can!" And I am confident that that day no geo-sentiment will be able to establish itself, no socio-sentiment will be able to erect barriers of discrimination in the human society, nor will any demon be able to harm millions of people in the name of humanism by exploiting their gullibility. And when those ever-vigilant human beings, those physico-psycho-spiritual entities, are able to merge their existential nuclei with the Supreme Existential Nucleus, then only will be Neo-Humanism be permanently established, and human beings will be ensconsed in the joy of freedom forever. On that day they will proclaim with full voice: "We have come to the world to perform great deeds - for the physical welfare of all, for the psychic happiness of all, and for the spiritual elevation of all - to lead all from darkness unto light."

Even then, if someone says, "No darkness is good for me !"- we will tell them, "Alright, darkness is good for you, but just once why don't you come and see the light- it is even better !"

P.R.Sarkar Calcutta, 29th March, 1982 (The Liberation of Intellect- Neo-Humanism) (pp.99-103) HE (Parama Purusa) is always with you

HE is always with you and HE is always watching you.

Baba has said that because Paramapurusa is always with you there is one advantage and one disadvantage.

The advantage is that because HE is always with you you are never to feel alone or have fear.

The disadvantage is that because HE is always with you you can do or think nothing in secret. HE witnesses all and knows your thoughts and desires always.

In this article, I'd like to share two experiences which relate directly to those two above points; starting with the latter point, "HE is always watching you".

Actually, this should have been in the "Precious moments in Patna" article in the last Pranam (Jan-Feb) but I felt too embarrassed to include it at first; however, it fits in nicely in this subject.

I was doing some typing in Patna for Dada Ramanandaji after Baba had arrived.back from morning field-drive and HE had just returned to HIS room. I had kept my ideation and battle with the mind on a fairly reasonable footing up till then when suddenly some vanity and egoism started taking roots in the mind. Normally I know that the sledge-hammer should come down straight away with any crude thoughts and auto-suggestion used immediately; I was slack this time and as soon as I allowed these propensities to start playing around, I heard Baba ring His bell in His room & at the same timefelt a thud in my heart. I knew that I had done wrong in my mind by not knocking out these crude propensities and worse still, i felt and knew that He knew too & something was going to happen! Word came to me soon through an acarya that Baba had said "Please ask the foreign (western) margii to go to his room as there are immigration officials observing the grounds for foreign margiis". "He should take care and stay out of main

I felt this was purely use of Satya by Baba and He was telling me off indirectly and demonstrating clearly that He gets upset when one doesn't control the mind of unruly propensities. I retired, heartbroken, to the jagriti where I took rest and picked up the nearest magazine which "automatically" opened itself to a page entitled "How to keep the guru pleased". It was very apt to the situation just passed and described. He really does know, and I feel Him looking over my shoulder all the time now!

Shortly after returning from India I had consolidated home into a van and was preparing for evening sadhana on a cold evening. I had a potbelly stove with smokeless fuel to keep me warm & which was burning well and giving much appreciated heat.

Having come out of sadhanaI felt rather groggy and weak and couldn't think straight; I had to literally stumble around on all fours trying to think why I felt as I did. I began to realise it was no joke and was beginning to feel desperatewhen an "inner voice" clearly spoke, I recognised it as Baba straightaway; "Mr Chapman(my english surname) you please take fresh air".

"Mr Chapman, you please take fresh air " this request was repeated several times until
I was able to open the rear doors of the van
and take several deep breaths of fresh air &
eventually regain full consciousness. I felt
very grateful for these words of the omnipresent Baba & realised the cause for my problem had been the burning up of nearly all
the oxygen in the van by the fire. There's
now no stove in the van & I try & keep warm
instead with the special warmth of the Lord's
love & care for His devotees.

BABA NAM KEVALAM.

Purna Deva

Is it love that I constantly forget You yet feel such pain, anguish & warmth at the remembrance of You?

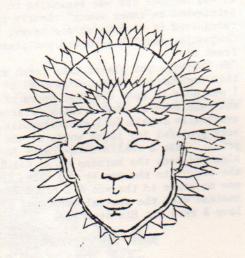
Is it love that my heart feels heavy & envious and my eyes fill with tears of sadness when I hear or think of others with You while years tick by without such joy?

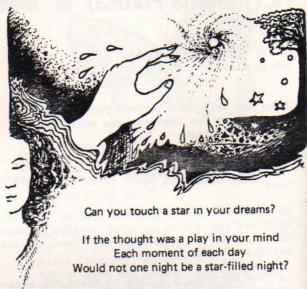
Is it love that I feel You so close to me; watching me, protecting me, yet so far away feeling alone and alienated?

Is it love
that my want for You
has grown so much
yet I crave for the pleasures of maya
to relieve (momentarily) in vain
the pain of separation?
Is it love
that I see the path to You
but feel too weak and uninspired
to surrender many of those bondages & desires
which block this path?

Is it love that always brings my troubles back to You as the cause of my griefs?
BABA what is this constant feeling that torments me so?

Narada Muni 23/7/83





To live for that dream
That one night of wonderment
I strive
Ever knowing I must return
Until all are liberated

Lord, you fill my mind And you tempt my heart With the promise of one touch Of the stars in your eyes

Madhusudan

One moment of love shared with you fills my total being like ecstasy captured warm and tender; more beautiful in every surrendered memory.

Jayadiipa 🔾

Prabhat Samgiita

SONG FOR SPRING

EK NUTANER SUR A'J BA'JALO BA'JALO
PHULE PHULE DOLA' DIYE

DHARITRII NABO SA'JE SA'JLO SA'JLO
SAB KLESH BYATHA' DILA BHULIYA
A'J SUMUKHE CA'LA'R PATHE NEI KONO BA'DHA'

KAN"T'HABARA' GA'N EKI SURE SA'DHA'
A'J BHED BHULE MILEMISHE EGIYE CALO HESE
(CALO) SAVA'IKE SAUNGE NIYE
PHULE PHULE DOLA'DIYE

NRTYERA CHANDE AHITA A'NANDE
PARA'N'ER PARA'GER SURABHITA GANDHE
NABABARS'ER EI HARS'ER PARIBESHE
SE GO KOTHA' SABA'RE JE DILA NACHIYE DILA MA'TIYE
PHULE PHULE DOLA'DIYE.

The melody of the new is played today With the swaying of the flowers The earth is wearing new garments, Making me forget all my pains. Today in the path of forward movement No obstacle stands in our way Our full-throated songs are all sung in one tune Forgetting all our differences, Merging together and laughing Let us march ahead today. Let us move together with all With the swaying of the flowers. In the rhythm of dance, with boundless bliss, In the fragrant aroma of the pollen of life In this atmosphere of new year's delight Where is He who has made us all dance, Where is He who excited our hearts? With the swaying of the flowers



Stimulating thoughts on Brahmacakra

preface

"In the roar of the ocean, in the thunder of the clouds, in the speed of the lightning, in the meteor's flaming fires," He hath said. The Clarion Call of the Universal has touched the soul.

Blessed is one who can revel in the presence of Nature, in ecstatic remembrance of the Eternal One. The Clarion Call of the oceam's roar will never be confined between the covers of a book.

Thus one day it happened that a famous scientist began a journey far from the country of his birth to seek out a living legend. It was in a small village of India that his pilgrimage ended. From afar, the man observed Baba lovingly at play with His beloved sons and daughters. The scientist queried, where were the formal prestige and distance which would surely surround such a renowned intellect? The physicist learned further that this simple man had never finished school. Acting instead out of such unscientific abstractions as love and duty, this Baba had taken a humble clerk's position to care for the needs of His parents.

The scientist approached Baba. The physicist could not have known before Whom he stood.

Few could have understood a word of the obtruse dialogue that followed. In the end, the scientist was humbled to the trace of His footsteps. Whether he realized the Liberator of humanity, we cannot say. The scientist departed in awe and silence, knowing that he had received darsham of the world's Greatest Physicist.

And in other fields also. In linguistics, botany, biology and medicine, in philosophy and history, in political science and the arts.

The glorious revelation of Tantra for a new age.

New standards of excellence in every field that touches upon An elevation of goals and purpose. the human condition. He has come for all.

Twice blessed is one who will know in Anandamurti, the Father of Devotion. He has come for You.

The scientific knowledge of the spheres will not unlock the treasure of spiritual devotion. This pearl of great price is the heritage of the simple and pure. The simple and pure must also become scientists of the highest order. Only then will inspired causality over the mundame sphere be held in

This series of articles came about in an attempt to answer some thoughtful inquiries by our readers regarding the place of mushrooms in the yogic diet. One question called for a clarification in the role of prama and energy exchange in green plants and mushrooms. This simple question requires a not so simple enswer and some controversy may be uneartised hereby. To advance an empirical definition of prama requires an understanding of the fundamental factors. The realm of the tanmatras and fundamental factors, what they are and in what subtle strata of the universe they exist, is possibly the least understand controversy and fundamental factors. stood concept of our philosophy dealing with the physical sciences. The reason is simple, We have not yet been given the entire picture.

Of the factors and tammetras, Baba has set forth a basic outline, but His writings whisper the song of something far more arcame than we have rushed to conclude. Controversy arises when we grasp the tail of a creature and try to intuit the rest. Present models of the SFF we mortals have assembled completely fall apart under a discerning scientific scrutiny. So what.

The cardinal purpose for which He has come is radically transcendental. If humanity is left without solution to the final enigms of quantum mechanics or left high and dry on the issue of tarmatras we are in no jeopardy. It may be only that in 500 years our progeny will look back and say, "So that is what He meant."

To understand the lowly mushroom, and indeed any biological phenomenon from a yogic perspective, a more expansive approach to the fundamental factors must be taken from the start.

For your respected consideration, I offer an advance hypothesis on the nature of the fundamental factors. "Advance" because it comes before ultimate clarification from whatever source. Mine alone is the responsibility for all errors which may fall at the gate of an immaculate Ideology.

PANCHATATTVA

AN ADVANCE HYPOTHESIS cakreshvara

We stand upon the shore of a vast ocean. The warm sand beneath our feet embraces a seemingly endless expanse of water. A gentle sea breeze blows through our hair.

Glory of creation, yes. The fundamental factors, no.

An understanding of the five fundamental factors and the tarmatras begins with the premise that solid matter, liquids and molecular air are all solid factor. Solid factor may include certain subatomic units with or without a charge, having a significant rest mass and traveling at velocities less than light speed.

The dividing point between factors is not sharply defined. Plasma is a chaotic borderline state between solid and liquid factor.

The building block of crude matter is the atom. The coherent unit of solid factor is the proton, or a hydrogen ion, whether or not solid factor can exist unstably in smaller fragments. The simplest stable parcel of solid matter is the hydrogen atom, a cooperative synthesis of solid and liquid factors.

* * 1

Liquid factor exists within the realm of electrical waves. Liquid quantum is the electron.

* * *

Photons are the elementary units of luminous factor.

* * *

Gravitation, the force fields surrounding charged atomic particles, and internuclear binding forces exist within the realm of aerial factor. The graviton, a particle of gravity is a quantum of aerial factor. The quantum mediators of three other basic aerial fields will be examined later.

* * *

Space is space, possessed of a wavelength which due to its subtlety does not offer resistance to the passage of cruder energies. Baba mentions the "etheron" implying a natural extension of quantum theory allowing that energy is propagated in discreet bundles. The mountainous obstacles standing between the theory and detection of the graviton are even greater regarding the fabric of space. Mortal scientists of our age will probably not find the "etheron".

In the physical universe, Prakrti exerts increased pressure upon the vibratory pression of Consciousness, and the wavelength of that expression decreases as cruder factors are created. In other words, curvature through time and space increases. Within a single factor, a parter wave carries greater energy and penetrative potential.

deBroglie extended the vibratory aspect of electromagnetic energies to include all forms of matter. A rock thrown across the room will also travel in extremely short waves. For matter in motion, as mass or velocity is increased, the wavelength becomes shorter. As mass becomes significant, the wavelength is so short as to be insignificant. Conversely, as a particle's wavelength becomes apparent, mass may be considered negligible.

deBroglie's formula for matter waves is:

$\lambda = h/mv$

where λ is the mass wavelength and 'h' is Plank's constant. As the numerical value of 'h' is in the order of 6.6262 x 10^{-27} , any measureable mass moving at a significant velocity will have an extremely short wavelength. This verification of Ananda Marga philosophy regarding the wave nature of material energy is one of the greatest revelations in the history of our sciences.

"LIFE CONSISTS ONLY OF AN OCEAN OF WAVES." Idea & Ideology p23

Recall that the fundamental factors also carry sensory attributes, and as cruder factors are evolved, additional attributes come into play.

Space, or Akasha tattva, creates the three dimensional superstructure necessary for the propagation of sound, although crude sound as we know it does not exist. Subtle sound is however present since Akasha is vibrational and all systaltic phenomena can be detected as sound given a proper receptive organ.

"WHEREVER THERE IS ANY VIBRATION...THERE IS SOME SOUND. THAT SOUND MAY NOT BE AUDIBLE, BUT THE SOUND EXISTS."

Ananda Vacanametam III

Regression to the causal elements of space obliterates the three dimensional bearing so the concept of a distance between two points becomes meaningless.

Under continued compressional impact of the static principle of Prakrti, aerial factor is evolved from space. The attribute of touch is now manifest.

Form is added with sound and touch in the luminous factor.

Taste is added to the others with the evolution of liquid factor.

Smell, taste, sight, touch, and sound are all present in the final condensation of solid factor.

All sensory indrivas can function by tannatras reflected and refracted from solid factor alone, our solid, liquid, and gaseous states of matter.

If rock, water and air are considered to be any other than solid factor, we are straightforward faced with a contradiction in metaphysical philosophy, namely the aeons of time required on a large scale for creation of the five elements from Cosmic Mind. We can infer the extent of billions of years in the formation of star systems. Compare this with the short time needed to condense water vapor into liquid and then freeze to ice.

"THE FORMATIONS (of the fundamental factors) ARE NOT ABRUPT BUT GRADUAL." We are also faced with some commonplace contradictions.

 Smell, taste and color of chlorine, bromine, iodine, etc. in the vapor state, exhibiting sensory inferences at the level of solid factor. The smell of sulphur gas and ozone are other examples.

BHU'TAM' TANMA'TREN'A PARICITYATE

"THE CATEGORY OF THE PHYSICAL ELEMENTS AN OBJECT BELONGS TO IS DETERMINED BY THE TANMATRAS EMANATING FROM THAT OBJECT...
WE WILL HAVE TO BASE OUR FINDINGS ON THE CRUDEST OF THE TANMATRAS THE PARTICULAR OBJECT CARRIES."

Ananda Sutram 2/23

2. In freezing, melting and boiling, the unit structure remains intact. The basic water molecule is the same in ice, water and vapor. Nuclear jad'asphota, while preserving laws of energy conservation, marks the creation of subtler quantum units. After jad'asphota reactions, crude mass is less than in the beginning. Disregarding infinitesimal relativistic transmutations, a simple change of state maintains crude matter in its original basic form.

"DUE TO JAD'ASPHOTA, THE COMPONENT FACTORS OF THE PHYSICAL STRUCTURE GET DISSOCIATED INTO THE FIVE FUNDAMENTAL FACTORS."

&I p9

- 3. Major energy liberation of jad'asphota reactions is absent in simple melting and boiling processes. Witness the conversion of solid factor into subtler components in an atom bomb versus the rather uneventful evaporation of a pool of water.
- 4. The impermeability of solid matter by liquids and molecular gas. Ananda Marga philosophy asserts that a subtler factor can, under conditions, permeate a cruder factor, undergoing a vibratory adjustment if necessary. Water or air obviously cannot pas through a piece of iron. The same piece of iron will readily permit transmission of electrons as liquid factor.

"SUBILER WAVES CAN PASS THROUGH CRUDER WAVES, AND UNDER SUCH CIRCUMSTANCES, THERE IS ALWAYS AN ADJUSTMENT OF WAVELENGTHS RESULTING IN THE CREATION OF PHYSICAL DIVERSITIES."

I&I p24

- 5. Disparity in the progression of subtlety if, for instance, one would progress from the electromagnetic luminous factor to the more refined aerial factor by reverting to crude moleculas gas. Baba has expressed that prana is acquired from light, amongst other sources. The model of air molecules riding on the back of light waves is untenable.
 - 6. My respected reader may be aware of other valid considerations.

Solid rock, flowing water, and the air we breathe are all solid factor, capable of carrying tarmatric inferences compatible with the five senses. We may define the conversion of matter from solid to liquid to gas, or from gas to liquid to solid, as being a change of state, not a change of the fundamental factor.

One ancient occult axiom is simply stated:

"As above, so below."

The meaning is one of recurrance of similitude, that subtler properties are partially represented in cruder strata. I introduce a concept of "octivity".

Octivity within a single factor is evident in the vibrating string of a musical instrument. As we ascend upon a tonal scale, a note vibrating twice as fast as the starting note will be the first octave, having tonal properties which are in one sense more subtle but in other ways identical. This recurrance continues up or down the scale past the point where our ears are able to receive the vibration as sound.

Transfactorial octivity is evident in radio waves of the electromagnetic (luminous) spectrum which can induce a sympathetic resonation in solid factor, as in crystal radios. I am reminded of one woman who went in for dental work and after having a filling put in, was bothered by a radio station every time she opened her mouth.

By transfactorial octivity, the liquid state of solid factor (water, mercury, etc.) will partially express the protean qualities of liquid factor existing in a more rarefied condition.

Furthermore, the spiritualist is witness to a translokic octivity. In the course of devoted sachana, an aspirant will become aware of glorious effulgences and celestial harmonies pouring forth from the spiritual spheres. To render the song of the kulakundalinii in majors and minors or the divine illuminations in golds or violets may evoke some dim empathy in the mind of the uninitiate who can at least grasp the mundane octave. Paranormal spiritual faculties in which the subject/object modality is still active, function by means of an entirely different set of tanmatras apart from those generated by the five fundamental factors.

Now to consider what may be the actual realms of the fundamental factors in descending order. In brief passages, an understanding of elementary algebraic operations will be helpful.

ETHERIAL FACTOR / AKASHA TATTVA

From the immortal Spirit comes all things. From the One has evolved the Cosmic Mind, and from that Cosmic Mind has blossomed the temporal universe.

"THE BASIC CAUSE OF MATTER IS NOTHING BUT ENERGY. MATTER IS NOTHING BUT BOTTLED UP ENERGY...

IF ANYBODY THINKS THAT THE WORLD IS EVOLVED OUT OF ATOMS OF ENERGY... HE IS VERY MUCH MISTAKEN... IS THERE NO ROOM FOR SHIVA OR CONSCIOUSNESS? THESE SO CALLED ATOMS OF ENERGY ARE INDEED DANCING ABOUT ON THE BREAST OF CONSCIOUSNESS HIMSELF.

Subha's'ita Sam'graha IV P 33-4

Space, thus created from something must in itself be something. Akasha tattve is the womb of spacial dimension, characterized by a long wavelength which offers no resistance to the passage of the forms it contains.

> "AKASHA OR ETHERIAL FACTOR IS MORE OR LESS A THEORETICAL FACTOR, AND BEING THE SUBILEST OF ALL THE BHUTAS HAS OUT THE MAXIMUM WAVELENGTH, SO ITS FLOW FACES NO PHYSICAL HINDRANCE, WHEREAS THE OTHER BHUTAS DO FACE SOME."

1&I p24

Yet in the wake of gravitation, space is convoluted. This compression of space by gravity seems to be as good a proof as any that space is substantial. Gravitational distortion of space is pronounced in proximity of large stellar masses. The entire universe is said by yogis to be egg shaped. A straight line is in reality an abstraction for this world, a rational approximation of the broader truth that all motion follows a curved trajectory.

> "NO MATTER HOW ENORMOUS THE COSMIC CIRCLE BE, IT WILL APPEAR TO BE ELIPTICAL, AND THAT IS WHY IT IS CALLED BRAHMANDA, ie., BRAHMA (COSMOS) PLUS A'ND'A OR ECC." SSIII p46

"THIS FIVE ELEMENTAL WORLD, THOUGH VERY LARGE AND EXTENSIVE, IS NOT INFINITE...
IT IS BOUNDED BY LIMITS...SUM TOTAL IS NOT SHAPPLESS...
THE SCIENTIST ALSO WILL ARRIVE AT THIS REALITY AND WILL RECOGNIZE THE CORRECTNESS
OF THE SACES' WORDS. THIS EXTREMELY VAST COSMIC MINDSTUFF RESEMBLING THE OVAL
SHAPE OF THE SOLAR WORLD IS KNOWN AS BRAHMANDA."

SSI p138

The existence of a universal ether is an ancient concept. The famous Michaelson/Morley experiment The existence of a universal ether is an ancient concept. The ramous michaelson/rorley experiment was an attempt to determine an absolute state of non motion by identifying "ether" as a stationary substance. Reasoning that our earth is in motion relative to an ether, a beam of light shown in opposite directions would meet calculable resistance going with or against the grain of space. Their heroic efforts, however, always ended with the same result. No difference could be found. This experiment sounded a death bell for the theory of a stationary etherial factor. We were left with planets flying through an ampty woid.

The last word was not in. Ancient ideas in any case are hard to die. Two scientists in different countries contemplated the Michaelson/Morley experiment and imagined something revolutionary. They theorized that the ether of space undergoes proportional contraction in the direction of motion. Light going against the grain of ether would have less distance to travel and arrive back at the source in the same time. Inspiringly enough, the equations of Lorentz extrapolated infinite contraction to coincide with the speed of light in a vacuum. A rod positioned parallel to its direction of motion will be reduced to a two dimensional disc at the speed of light. This further meant that the velocity of light. "c", is the fastest speed that a material object can travel through space.

Contraction of Euclidean space affects another strange alteration, that of time. Realize that all relativistic transformations are witnessed from the subjectivity of a stationary observer. A witness moving with the accelerated system will observe no change of any sort.

In the process of dimensional contraction in high speed systems, a distance to be crossed will take the same amount of time for an observer moving with the system. To maintain temporal integrity, from the standpoint of the stand

The still witness will record both a spacial contraction and a slowing of time's passage. At the point of infinite contraction, time stands still. Clocks slow down, ageing is retarded. All actions proceed in slower motion as relative speed is increased.

To the near light speed traveler, all things are normal, but our motionless witness may see a flat pancake suspended in time fly by at an incredible velocity. The traveler looks at his watch a few seconds have passed. But as he returns to tell his companion of the voyage, the friend he left behind has been gone for thousands of years.

Motion, regardless of how slow, is subject to the laws of relativity. These effects are only significant when we are moving at 9/10 the speed of light or faster.

The curvature of space is only significant in astronomical distances or in the presence of tremendous gravitational fields, so our abstraction of a straight line is nonetheless a useful nonentity when dealing in worldly matters.

Before looking at the realm of aerial factor, we briefly consider some other implications of objects moving through space. In dealing with crude matter, it is useful in the eye of relativity to distinguish between the object's rest mass (m_o) and its relative mass (m).

In the crudification of Consciousness, Prakrti has succeeded in a transformation of the

In the crudification of Consciousness, Frakti has succeeded in a transformation of the transcendental Essence into tangible, solid matter. The amount of bound Consciousness in an object is expressed as its mass. The action of aerial factor upon an object results in a relative force we call weight, which will vary as per the intensity of the interacting aerial forces. The amount of mass in an object remains constant until it starts to move. The amount of mass in a stationary body is its rest mass. As the mass is accelerated, mass relative to our stationary observer increases. The limiting condition is again the speed of light. At "c", an object with any rest mass

* * *

The concept of inertia. Energy we equate with forces of change and motion. Consciousness crudified into energy, crudified into matter, and localized in space manifests as the inertia of a mass. Inertia is a property of matter to either remain at rest or in a state of uniform motion until acted upon by another force. A car of considerable mass rolling along a level road will tend to keep rolling but for friction.

tend to keep rolling but for friction.

The greater the mass of an object, the greater the inertia, and a greater force is required to cause an acceleration of movement. Since the relative mass of an object increases toward infinity as the object's speed approaches that of light, a proportionally greater force is needed for further acceleration. Infinite force is required to overcome infinite inertia which would be the property of an infinite mass consumated at light speed. As this is not possible in our mundame universe, a piece of 'matter' must ever travel below the speed of light. This property places frustrating obstacles in the path of traditional alternatives of interstellar travel.

"Cod's Quarantime" between the stars may take quite some time to be resolved.

Einstein observed that the increment in energy (E) needed to overcome the inertia of increased relativistic mass was being directly converted into the mass itself. This was the genius of his

E = mc2

He further observed the following relation between rest and relative mass as a function of velocity:

 $m = m_0 \sqrt{1 - v^2/c^2}$

"V" is the mass velocity. Here one can more easily see the limiting conditions. If the body is at rest, m=m, At light speed, m is infinite if the object carries any rest mass. We will refer to these two basic formulae again.

AERIAL FACTOR / MARUT TATTVA

Often we hear an example of wind blowing against our face and the sensation evoked as being the sense of touch imparted from air, or aerial factor. The reason and reasoning both should be

examined.

What is the root of touch? In the case of wind, air molecules swept by Grace run into our face and must impart their kinetic inertia into other forms of energy.

The inertia of mass in motion is its momentum (p). Momentum is a product of an object's mass

and relative velocity.

P = mv

If velocity undergoes change, a force is imparted. Change of velocity is acceleration (a). Force is an object's mass times acceleration.

= ma

Pressure is such a force. When a force presses upon our physical body, we experience a touch.

The sense of touch is more specialized than one might first imagine. Subtle judgement reveals that all sense inferences are rooted in touch of sorts

"THE INTRINSIC MEANING OF AIR IS PRANA. IT IS WITH THE HELP OF AIR OR VITAL ENERGY THAT YOU HEAR, TASTE, SMELL, WALK OR SEE." SSIV p66

In all sensory organs, a form of vibratory energy is transformed into an electrical potential creating a flow of liquid factor through nerve fibres. In touch, a pressure or force causes a distortion of touch receptor membranes changing properties of osmotic permeability for electrolytes in the surrounding fluids. These osmotic alterations allow ions to polarize on the inside and outside of the touch organ. When the electric potential can no longer be contained within the receptor permeability factor releases across the efferent permeability to the brain to be interpreted by the nerve, liquid factor pulsates across the afferent nerve pathway to the brain to be interpreted by the mental body and witnessed by the Atman. Nerve transmissions are slow, varying more or less than one

or two hundred meters per second.

Touch receptors exist which only receive pulsative or intermittent pressures. Semicircular canals in the ear telepathize physical balance. Pain is a touch, the only physical sense with a built in emotional response. Special touch receptors monitor the spacial position of our limbs and reflect the dimensions of objects we hold. Thermal monitors and other autonomic sensors of internal states fall within the sense of touch. Heat and cold are recognized by special touch sensors.

The energy of heat is expressed luminous factor, a photonic propagation below the human threshold of our visible spectrum which we nevertheless feel as touch. Touch from thermal luminous factor is expressed by the pramic constituent of this invisible light.

evoked by the pranic constituent of this invisible light.

If force or pressure can be shown to exist within the jurisdiction of subtler energies, we must conclude that aerial factor is something other than crude molecular air. This has just been done regarding heat perception.

"WHATEVER HAS THE CAPACITY OF CARRYING OR BLOWING ANYTHING IS CAILED AIR IN THE PERVASIVE SENSE."

SSIV p67

Aerial factor is brought forth from the crudification of space. Between crude air and space, there is an abundance of particles and energy fields. The next subtler wavelength on the rock side of space is the gravitational flow. The graviton, a particle of gravity, has no rest mass and is thus able to travel at light speed, not present in action at a distance as was thought during Newton's time. Rearranging one of our formulas:

V = C VI - m2/m2

If m_=0, then v=c.

The recent identification of gravity waves is a stepping stone to the construction of a dialectic material which will block gravity flux. Endless possibilities await tomorrow's humanity when this secret is discovered. The means of space travel in H. G. Wells' "First Men on the Moon" may some day be a reality.

Even as space pervades gravity, gravitational waves flow through cruder structures. The permeability property between subtler and cruder factors is maintained.

Force exists in gravity, a tenuous touch which links all things together. The force or inverse pressure of gravity is a force by virtue of its causing an acceleration upon matter. Einstein observed that uniform acceleration of a mass and gravity are for all purposes identical. The force of gravity is proportional (2) to the product of the masses of two bodies and inversely related to the square of their distance apart (r).

$F \approx m_1 m_2/r^2$

By virtue of its vibratory nature, subtle sound is present in this stratum. Exerting force or touch, gravity is within the scope of aerial factor.

Electrical charge, not the electron itself, but the field surrounding the electron is aerial factor. This is liquid factor with a pranic aura. A proton is solid factor with a pranic field. Electric charge (Q) is a force of attraction or repulsion exerted on other charged particles through aerial field interaction. The force of interaction between two electrons is related as follows:

$F \approx Q_1 Q_2/r^2$

Note the similarity with gravitational force.

An electric charge in motion gives rise to a magnetic field, also aerial factor. Interaction roughly follows the 1/r decay, but not exactly so, since a single polarity of magnetic force has not been isolated. Magnetism exists as a north and south dipole. Magnetic influence between two sources must be resolved by the interaction of four vectors.

Magnetism is another relative field. The stationary witness of electrons in motion will observe a magnetic field. One moving with the flow of electricity will not find any properties of magnetism.

Pranic fields beyond the scope of human perception are sensed by migratory birds helping them maintain their proper course. The earth's magnetic field guides the birds over oceans and continents. Strong magnets hung around the neck of these species will obscure the earth's weaker field and confound their direction of flight.

In general, the active expression of multiple factors occurs more strongly in smaller objects. The pranic field around subatomic particles is a worthy example. One such exception to this tendency is found in phosphorous, which can express both luminous and solid capabilities. A better example is observed in paramagnetic metals where the expression of latent factors is not dependent on any form of external induction. Here is a large solid object radiating a strong aerial force field.

The iron magnet reveals an important moral lesson. In unmagnetized alloys, the pranic dipoles of each atom are scattered at random. With so many forces working at odds, the sum expression is zero. When the small contributions of each atom are collectively directed and aligned, the resulting force is clearly defined and powerful. So this should be with the benevolent energies in human society if anything of lasting worth is to be accomplished.

ABRIAL FACTOR AND THE QUANTUM FIELD THEORY

Disruption of everything we hold to be physically sacred would not be complete without examining prans in the light of quantum field theory. Einstein distorted our metal rods, slowed our clocks and gave us the invariability of the speed of light, and except for "c", pulled the rug out from under the very foundation of an objective stance. At least we were left with the conservation of energy and matter, that is until the quantum field discovery.

Gravity is an aerial field of vibratory nature with an aerial quantum, the graviton. The graviton has thus far eluded mortal eyes, but the field of gravitational waves has been discovered emanating from violent disruptions in the heart of a distant galaxy.

Gravity is the weakest of the four aerial glues holding the cosmos together. In macromolecular bodies where stronger forces cancel each other, and at greater distances where these fields are all but inoperative, gravity is the predominant aerial energy.

Rationality is assaulted by the nature of transfer particles in the aerial glues.

To recognize the upheaval of mass/energy conservation in worlds of subatomic size and infinitesimal time scales, one must understand the strange existence of the "virtual particle". Virtual particles are mediums in the transfer of aerial factor.

An electron is a parcel of liquid factor possessing both luminous and aerial fields. Adjustment of orbital status in proton/electron configuration alters electron energy potential, compensated by an absorbtion or release of energy. An electron dropping to a lower energy level emits a luminous photon, and mathematically, energy and mass are conserved in every part.

A conceptual problem arises when we discern the quantum field mechanism which gives rise to pranic binding between subargmic parcels of matter. In electromagnetic interaction, the field of

pranic binding between subatomic parcels of matter. In electromagnetic interaction, the field of proton/electron attraction is mediated by "virtual" photons, created without any change in electron

orbital status or energy level!

A cloud of virtual particles surrounds electrons and protons. You may see that the mystery lies in the creation of a particle with no external input of energy and no change in the parent particle. The virtual particle has no apparent causal source beyond a beginning location. One theory hints that the structure of space contains energy which furnishes the virtual substance in a reaction too obscure for present means of detection. From a yogic perspective, this could be possible.

The virtual particle is projected within a regulated vicinity of the parent body and is almost instantaneously reabsorbed and anihilated. If virtual quanta are absorbed by other than their lokic source, a pranic link is formed between the two particles. As either a rest or relative mass is inherent in virtual quanta, and a velocity of transfer is involved, these ephemeral creations are mediators of binding momentum, aerial in their anihilation between particles.

If the compatible mediator of aerial factor is a photon, the force of attraction or repulsion

is electromagnetic.

Other than gravity and electromagnetic attraction/repulsion among charged quanta, there is another pranic force called the "strong" interaction, binding protons and neutrons together in atomic nucleii. "Strong" aerial interaction is about 100 times as great as the electromagnetic repulsion of two protons although the significant range of the strong pranic aura is only about the diameter of a proton itself. At greater distances than this, electromagnetic prana is dominant. A free proton will be repelled from another atomic nucleus unless the proton's momentum is such to overcome the charge repulsion, in which case the "strong" force will pull the proton into the nucleus and the solid factor element will be changed.

Neutrons are a neutrally charged merger of solid and liquid factor. Their function in the nucleus is to increase strong aerial cohesion without altering nuclear charge. Neutrons outside the atomic nucleus are relatively unstable with a half life of about 11 minutes before solid and liquid factors

Virtual quantum mediators of aerial factor exist in the strong interaction. The virtual particle is called a 'pion'. It exists for only about 10²⁸ seconds and has a small rest mass. Virtual pions are being continually created and anihilated in a cloud around protons and neutrons. If the absorbtion is between nucleons, "strong" aerial bonding is acquired.

If virtual photons and pions are able to absorb energy from an external source, they are freed into space. Maintaining conservation laws, they attain a "real" status, and with this "real" status, a greater measure of temporal stability is gained. In the case of a photon, the "real" particle is now a stable quantum of luminous factor, not a temporary entity called into being to transmit an aerial field.

A fourth aerial factor is the so called "weak" force involved in neutron decay. The virtual mediator is a meson, brought into existence for only 10-"seconds to transmit its aerial substance. The vector meson has not been seen yet, but theoretically, it should be there.

Thus we have four aerial force fields which are sufficient to explain presently known material

interaction, in descending order of strength:

AERIAL FACTOR	RELATIVE STRENGTH	EXCHANGE PARTICLE
Strong nuclear	1	Pion
Electromagnetic	10-2	Photon
Weak nuclear	10-13	Meson
Gravitation	10-38	Graviton

Prana in the living being is 10 specialized functions of aerial factor. Presently, there are about 150 or so known subatomic particles. The list is growing over time. Each of these quanta has its own unique aerial field which can ideally be resolved into some blending of the basic four forces. When our knowledge of the pranic vayus is more complete we may be able to likewise find their substance in the basic four interactions. In time, there will no doubt be a resolution of the basic four aerial fields into one primal cause. There is already evidence that electromagnetic and weak fields are a different expression of the same energy.

The subject, object, and method of knowing process of cognition falls apart in microatomic realms.

At this level, even our act of seeing changes the parameters of a system.

In dealing with these mineature universes, we are faced with an uncertainty principle. If we pinpoint a particle's location in space, the momentum becomes unknown and the other way around. This has nothing to do with the crudity of our microscopes. Uncertainty is an inherent principle in subjectification of microatomic realities.

Heisenberg's Principle of Uncertainty:

Da Dmv = h

is parameter uncertainty "q" is particle position

The uncertainty of an object's position versus its momentum is greater than or equal to Planck's constant. Recall that this constant is a very small value in units of energy-time. Uncertainty in position and velocity is given by:

Da Dv = h/m

This snows that even in the macroscopic world, uncertainty exists but may be considered insignificants out sample milligram pellet fired from a shotgun is subject to an uncertainty of about .3 meters per centura

We touch upon the transcendent in subatomic subjectification. The uncertainty of a particle's position and momentum also applies to the time lapse of an event and the energy involved. The uncertainty principle can be written in this form:

ΔE Δt ≥ h

In the subatomic world, if the energy of an event is well known, we cannot be sure of the time involved. If we can know the time reference with any certainty, the energy becomes vague.

The violation of mass/energy conservation in virtual particles is overlooked by the universe because of how fast the reaction takes place. In 10 seconds, the virtual pion's creation, anihilation The violation of mass/energy conservation in virtual particles is overlooked by the universe because of how fast the reaction takes place. In 10 seconds, the virtual pion's creation, anihilation and aerial transfer is finished within the limit of energy uncertainty. The pion, having a rest mass, travels at less than light speed. The distance it can traverse before anihilation is short, otherwise it will be caught violating Nature's conservation laws. This is why strong interaction is confined to such a short range. A pion freed by an external force preserves energy conservation and can in good faith remain in time and space for a longer duration.

Strong virtual particle forces involving more energy must act more swiftly to avoid being caught in the paradox of their own existence. Weak aerial exchange, causing a lesser magnitude

disruption can take longer to manifest, thus a vector meson can flaunt E = mc2 for 10 seconds. This added temporal grace allows for a greater spacial arena of jurisdiction.

Particles generating similar virtual quanta can interact if their field radius overlaps. A proton produces virtual photons and virtual pions, among others, so it can interact in this exchange model with protons and electrons by strong/electromagnetic and electronagnetic pranas respectively.

An electron does not produce virtual pions and is therefore immune to aerial fields of the strong variety.

Aerial electromagnetic binding between charged particles is affected by a photon which, although having a virtual status, is luminous, not aerial. Likewise, pions and vector mesons have been designated as aerial mediators, not aerial factor. Indications are than virtual exchange quanta for strong and weak interactions have considerably more mass than an electron. By standards of the subatomic realm, it is aesthetically difficult to appreciate so heavy a particle as being a fragment of aerial factor.

These particles could be specialized units of solid factor fleetingly brought into play to transmit aerial energy by their own destruction. We cannot say what tammatras would be derived from a 20 kg bag of vector mesons sitting on a table. This issue must be left pending for now. Whether pions and mesons are aerial quanta or specialized units of solid factor, it remains that they are virtual conveyors of aerial factor.

For simplicity, we will leave the quantum field model and deal with pranic content of the fundamental factors in more classical terms of a particle and its field. It is my simple feeling that future scientists will realize a unified field theory in which virtual particles can be shown to preserve principles of energy conservation.

LUMINOUS FACTOR / TEJAS TATTVA

The electromagnetic spectrum comprises the realm of luminous factor. Lower frequency energies are radio and heat waves. Visible light is only a small portion of luminous factor. Higher energy ultraviolet, X-rays, and gamma rays are luminous. In all cases a photon is the unit.

"c" in a vacuum is attained as with gravitation since the rest mass of a photon is also zero.

The simple algebra for a graviton's velocity applies here.

With gravitation and light, deBroglie's theory of wave propagation shows that frequency is pronounced due to insignificant quantum mass. Whereas a photon's rest mass is considered to be zero, its relativistic mass is a finite sum, however small.

Light is vibratory, possessing subtle sound. Light conveys a force or touch inherent in aerial factor as we have seen in the thermal infrared radiances.

Photonic passage through space creates a systaltic aerial field with electric and magnetic axis extended perpendicular to the direction of flow. Light is therefore classified as a transverse



In practical experience, the touch of light is known in "solar winds". A comet orbiting around the sun will always have its tail pointing away from the sun, being blown by the force of light. Designs have been made for spacecraft which would travel in our solar system by setting up huge sails in space, propelled by the wind of light like a sailboat at sea. The force of light is evident in lasers and photosynthesis. Almost every activity on earth is an example of light's

(Part Two of this article will be in the next PRANAM)

force.

"There is only one basic force which drives nature"

Major discovery in physics

Geneva, June 2 (AP): Leaders of an international research group yesterday announced what they claimed was the greatest discovery for a quarter of a century in

ery for a quarter of a century in scientists, probe into the mystery of matter and energy.

"We have finally found the "Z-Zero" sub-atomic particle, whose existence has long been a consistent of the which was so postulated but which was so named because it was expected to be the last particle ever to be discovered, "said Dr Carlo Rub-bia, who led the team of 126 researchers.

Yesterday's announcement followed the disclosure in January by the same team of another breakthrough, the discovery of the "W" particles, also es ential

Professor Herwig Schopper, director-general of the Euro-pean Laboratory for Particle Physics (CERN), said it "was the most important discovery in physics* since the invention of the solid state transistor 25 years

The discovery of the sub-particles at CERN is significant because it adds weight to the because it adds weight to the theory that there is only one basic force which drives nature. Until now physicists have worked with the theory that there are four: gravity, the "strong nuclear force" which holds atoms together, the electromagnetic force used in radio waves, and the "weak nuclear force" which is responsible for the burning of is responsible for the burning of

particles, one with a negative and one with a positive charge, and the Z-Zero, we now know that electromagnetism and the weak force are two manifesta

weak force are two manifestar tions of a single force called "electroweak," said Dr Rubbia. Transmitters of these forces are known as "bosons." The bosons are created for a period a hundred times shorter than a millionth of a millionth of a millionth of a second by smashing a stream of protons against their negatively charged

opposites, anti-protons.

This smashing process is performed at a total energy of 540 billion volts in CERN's massive underground particle accelera-tor ring measuring 2.2 km in tor ring measuring 2.2 km in diameter. The Z-zero particle created is a hundred times heavier than a proton which is why such massive energies are required, Dr Rubbia said.

From the impact a multitude of particles condense but, said Dr Rubbia, the problem is detecting those particles being hunted. It was particularly in detection and identification techniques that the team made significant advances, he said.

A full analysis of the results will take months but hopes are riding high that a further major discovery will be made this year, he said. Buried in the mass of data on the decay of the Z-Zero particle could be evidence of the existence of the last quark, the elusive "T" or truth quark, one "With the discovery of two W ing blocks of matter. of the 12 smallest known build-

NOTICES

Articles, poems, drawings (black line work) and stories are just some of the forms that contributions can take. Pranam can be a source of inspiration, ideas and joy if we all share these by putting pen to paper and sending them into 'Pranam', 620 Bourke Street, Surry Hills, 2010

Jail Correspondence

The margiis in jail appreciate and are inspired by whatever communication they have with us. Letter writing is the easiest way of doing this regularly.

CALLING ALL PRIMARY TEACHERS

Sunrise School needs a spiritually-based and talented teacher for 1984 to help guide the school through its next phase of its growth. The school is well established, it has been running for 8 years, and offers scope for the personal expression of teaching ideas as well as the support of another teacher and margiis.

This is a well-paid position & for details contact the school at 1 Perentie rd., Belrose NSW 2085. Ph. (02) 452 2643.

We now have the next 8 cassettes of Prabhat Samgiita ready for distribution They are available from the Sectorial Office for \$30.

SUVA SECTORIAL OFFICE 620 Bourke St Surry Hills NSW 2010 Ph (02) 698 7627

ACARYAS

Ac Paritosananda Avt Sectorial Secretary

Ac Japasiddhananda Avt Additional Sectorial Secretary Ac Janardana Brc Sectorial Office SEcretary c/- Sectorial Office

Ac Parananda Avt HPMG LFT Trainer c/- Anandapalli

Ac Krsnasevananda Avt RS Brisbane Region c/- Brisbane Jagrti

Ac Brahmakrpananda Avt RS Wellington; Sectorial Press, AMJAS, EMS c/- Wellington Jagrti

Ac Nityapremananda Avt ARS Suva Region c/- Wellington Jagrti

Ac Deveraja Brc c/- Wellington Jagrti

Dada Diipaunkara Sectorial S.B.,Farm,AMPES ARS Perth Region c/- Perth Jagrti

REGIONAL ADDRESSES

Sydney c/- Sectorial Office

Wellington c/- RAWA House

Melbourne 5 Lawson St Elwood VIC 3184 Bh (03) 531 6669

Adelaide 10 The Grove Lower Mitchum SA 5062 Ph (08)277 7819

ADDRESSES

SPECIAL PROJECTS

Mt Tully Community School

Anandapalli P.O.Box 3 Severnlea QLD 4352

Auckland Master Unit c/- Auckland Jagrti

Clearlight. 201a Rundle St Adelaide SA 5001 Ph (08) 223 6362

Sunrise School Sydney 1 Perentie Rd Belrose NSW 2085 Ph (02) 452 2643

RAWA House Wellington 301 Cuba St Wellington New Zealand (p.o.box 6096) Ph (0014 64 40)844 336

RAWA House Sydney 167 Addison Rd Marrickville NSW 2204

PRISON ADDRESSES

Tim Anderson(Govinda)
Ross Dunn(Vishvamitra)
Paul Alister(Narada)
Walter Maresch(Shaktideva)
Gary Purdey(Garesh)
Ron Chester(Madhusudam)
["Buck "]
Locked Mail Bag No. 2
Nth Parramatta NSW 2151

John Palmer(Jiivan) P.O.Box 13 Matraville NSW 2036

Brisbane 34 Wellington ST Petrie Tce QLD 4000 Ph (07) 369 8343

Hobart 10 McGuiness Crescent Lenah Valley TAs 7008 WWS SECTORIAL OFFICE GLOBAL GVTC 199 Clauscen St North Fitzroy VIC 3008 Ph (03) 481 5324

ACARYAS

Avtka Anandasampurna Ac Sectorial WWS Secretary

Avtka Anandabratati Ac GV LFT Trainer & DS Melbourne

Brcii Radha Ac

Brcii Malati Ac

Brcii Brtadaya Ac

Brcii Krsna Ac

Brcii Vimala Didi C/- WWS Jagrti Melbourne

Brcii Shyama Didi Flat 1 18 Blakney St Highgate Hill Brisbane

WWS Master Unit P.O.Box 48 Gympie QLD 4570

Perth 7 St. Leonards Ave West Leederville WA 6007

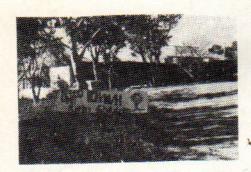
Cairns 65 Martyn St Cairns Nth QLD 4870

Maroochydore 120 Duporth Ave Maroochydore Q1D 4558

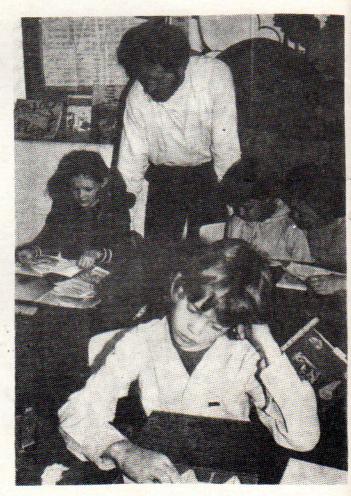
Auckland 192 Sandringham Rd AUCKLAND NZ Ph (0014 69) 893 247











Bábá Nám Kevalam